Examiner: W. Sandals

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Mary Ann D. Brow et al.

Serial No.:

Group No.: 1636

Filed:

Entitled:

Rapid Detection And

**Identification Of Pathogens** 

# PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

# **CERTIFICATION UNDER 37 C.F.R. § 1.10**

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the U.S. Postal Service on this date August 28, 2001 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL 790816757 US addressed to: Box Patent Application, Assistant Commissioner For Patents, Washington, D.C. 20231.

Susan M

Sir/Madam:

The following communication is responsive to the Restriction Requirement in the Office Action mailed August 15, 2001 for patent application serial number 09/655,378. In the restriction requirement, the Examiner restricted the claims into four groups: Group I, Claims 45-70; Group II, Claims 71-94; Group III, Claims 95-108; and Group IV, Claims 109-123. Applicants elected Group I for prosecution with patent application serial number 09/655,378. The present Divisional Application is directed to the claims in Group IV (*i.e.*, Claims 109-123).

## IN THE TITLE OF THE INVENTION

Please substitute the title "KITS FOR THE DETECTION OF TARGET SEQUENCES" for the currently pending title.

#### IN THE SPECIFICATION

Please add the following paragraph after the Title of the Invention, but before the Field of the Invention.

This application is a Divisional application of co-pending application U.S. Patent Appln. Ser. No. 09/655,378, filed September 5, 2000, which is a Continuation of co-pending application U.S. Patent Appln. Ser. No. 08/520,946, filed January 15, 1998, which is a Continuing Patent Application of U.S. Patent Appln. Ser. No. 08/520,946, filed August 30, 1995, which is a Continuation-in-Part application of U.S. Patent Appln. Ser. No. 08/484,956, filed June 7, 1995, now U.S. Patent No. 5,843,654, issued December 1, 1998, which is a Continuation-in-Part application of U.S. Patent Appln. Ser. No. 08/402,601, filed March 9, 1995, now abandoned and the Continuation U.S. Patent Appln. Ser. No. 08/802,233, filed February 19, 1997, now U.S. Patent No. 5,888,780, issued March 30, 1997, which is a Continuation-In-Part Application of Application Serial No. 08/337,164, filed November 9, 1994 and the Continuation U.S. Patent Appln. Ser. No. 08/789,079, filed February 6, 1997, now U.S. Patent No. 5,719,028, issued February 17, 1998, which is a Continuation-In-Part Application of Application Serial No. 08/254,359, filed June 6, 1994, now U.S. Patent No. 5,614,402, issued March 25, 1997, which is a Continuation-In-Part Application of Application Serial No. 08/073,384, filed June 4, 1993, now U.S. Patent No. 5,541,311, issued June 30, 1996, which is a Continuation-In-Part Application of Application Serial No. 07/986,330, filed December 7, 1992, now abandoned.

#### IN THE CLAIMS

Please cancel Claim 45-108.

#### **REMARKS**

Claims 45-108 are cancelled as they are being pursued in separate applications. A copy of the pending claims, as amended, is attached for the Examiner's convenience. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect at (608) 218-6900.

Dated: August 28, 2001

David A. Casimir Registration No. 42,395

MEDLEN & CARROLL, LLP 101 Howard Street, Suite 350 San Francisco, California 94105

# VERSION WITH MARKINGS TO SHOW CHANGES MADE

# In the Specification:

At page 1, following the Title of the Invention, please insert:

-- This application is a Divisional application of co-pending application U.S. Patent Appln. Ser. No. 09/655,378, filed September 5, 2000, which is a Continuation of co-pending application U.S. Patent Appln. Ser. No. 08/520,946, filed January 15, 1998, which is a Continuing Patent Application of U.S. Patent Appln. Ser. No. 08/520,946, filed August 30, 1995, which is a Continuation-in-Part application of U.S. Patent Appln. Ser. No. 08/484,956, filed June 7, 1995, now U.S. Patent No. 5,843,654, issued December 1, 1998, which is a Continuation-in-Part application of U.S. Patent Appln. Ser. No. 08/402,601, filed March 9, 1995, now abandoned and the Continuation U.S. Patent Appln. Ser. No. 08/802,233, filed February 19, 1997, now U.S. Patent No. 5,888,780, issued March 30, 1997, which is a Continuation-In-Part Application of Application Serial No. 08/337,164, filed November 9, 1994 and the Continuation U.S. Patent Appln. Ser. No. 08/789,079, filed February 6, 1997, now U.S. Patent No. 5,719,028, issued February 17, 1998, which is a Continuation-In-Part Application of Application Serial No. 08/254,359, filed June 6, 1994, now U.S. Patent No. 5,614,402, issued March 25, 1997, which is a Continuation-In-Part Application of Application Serial No. 08/073,384, filed June 4, 1993, now U.S. Patent No. 5,541,311, issued June 30, 1996, which is a Continuation-In-Part Application of Application Serial No. 07/986,330, filed December 7, 1992, now abandoned.--

#### PENDING CLAIMS

- 109. A kit, comprising:
  - a) a cleavage means; and
- b) a first oligonucleotide comprising a duplex region adjacent to a single-stranded 3' arm.
- 110. The kit of Claim 109, wherein said first oligonucleotide comprises a fluorophore having quenched emission.
  - 111. The kit of Claim 109, wherein said cleavage means comprises an enzyme.
  - 112. The kit of Claim 111, wherein said enzyme comprises a DNA polymerase.
- 113. The kit of Claim 112 wherein said DNA polymerase comprises a thermostable DNA polymerase.
- 114. The kit of Claim 113, wherein said thermostable DNA polymerase is derived from an organism from genus Thermus.
  - 115. The kit of Claim 111, wherein said enzyme comprises a 5' nuclease.
- 116. The kit of Claim 111, wherein said enzyme comprises a thermostable 5' nuclease derived from a thermostable DNA polymerase modified to have reduced synthetic activity.
- 117. The kit of Claim 109, wherein said first oligonucleotide is less than 100 nucleotides long.
- 118. The kit of Claim 109, wherein said first oligonucleotide is less than 50 nucleotides long.

- 119. The kit of Claim 109, further comprising a second oligonucleotide.
- 120. The kit of Claim 119, wherein said second oligonucleotide comprises a region complementary to said single-stranded 3' arm of said first oligonucleotide.
- 121. The kit of Claim 119, further comprising a first nucleic acid molecule containing a portion complementary to at least a portion of said second oligonucleotide.
  - 122. The kit of Claim 121, further comprising a third oligonucleotide.
- 123. The kit of Claim 122, wherein said third oligonucleotide contains a portion complementary to at least a portion of said first nucleic acid molecule.